

Form 1449 (modified)

Docket: 097/002

U.S.S.N. To Be Assigned

Information Disclosure Statement By Applicant

(Use Several Sheets if Necessary)

Title: Tolerizing Allografts of Pluripotent Stem Cells
Inventors: Choy-Pik Chiu, Robert M. Kay

Filing Date: November 21, 2001

Group: To Be Assigned

1636

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U.S. Patent Documents

Examiner Initial	Ref.	Patent No.	Filing Date	Issue Date	Class/Subclass	Inventors:	Title:
QN	A	5,082,670	Dec 15/88	Jan 21/92	424/520	Gage, F., et al.	Method of Grafting Genetically Modified Cells to Treat Defects, Disease or Damage or the Central Nervous System
	B	5,635,387	Apr 3/95	Jun 3/97	435/378	Fei RG et al.	Methods and Device for Culturing Human Hematopoietic Cells and Their Precursors
	C	5,672,499	Jun 7/95	Sep 30/97	435/240.4	Anderson DJ et al.	Immortalized Neural Crest Stem Cells and Methods of Making
	D	5,716,411	Feb 6/96	Feb 10/98	623/15	Orgill, D., et al.	Method of Skin Regeneration Using A Collagen-Glycosaminoglycan Matrix and Cultured Epithelial Autograft
	E	5,733,541	Apr 21/95	Mar 31/98	424/93.1	Taichman RS et al.	Hematopoietic Cells: Compositions and Methods
	F	5,736,396	Jan 24/95	Apr 7/98	435/366	Bruder SP et al.	Lineage-directed Induction of Human Mesenchymal Stem Cell Differentiation
	G	5,750,397	Jun 6/95	May 12/98	435/372	Tsukamoto A et al.	Human Hematopoietic Stem Cell
	H	5,843,425	Jun 5/95	Dec 1/98	424/93.1	Sachs DH et al.	Transplantation and Graft-Versus-Host-Disease
	I	5,851,832	Jun 7/95	Dec 22/98	435/368	Weiss S et al.	In Vitro Growth and Proliferation of Multipotent Neural Stem Cells and Their Progeny
	J	5,843,780	Jan 18/96	Dec 1/98	435/363	Thomson, J.	Primate Embryonic Stem Cells
	K	5,858,963	May 8/95	Jan 12/99	514/2	Hawley RJ et al.	Inducing Xenograft Tolerance and Porcine Cytokines Therefor
	L	5,863,528	May 26/95	Jan 26/99	424/85.1	Hawley RJ et al.	Porcine Cytokines
	M	5,876,708	Jun 1/95	Mar 2/99	424/93.1	Sachs DH	Allogenic and Xenogenic Transplantation
	N	5,968,829	Sep 5/97	Oct 19/99	435/467	Carpenter M	Human CNS Neural Stem Cells
	O	6,006,752	May 8/97	Dec 28/99	128/898	Sykes M	Mixed Chimerism and Tolerance
	P	6,015,554	Jun 7/95	Jan 18/00	424/93.7	Galy AHM	Method of Reconstituting Human Lymphoid and Dendritic Cells
QN	Q	6,090,622	Mar 31/97	Jul 18/00	435/366	Gearhart, J., et al.	Human Embryonic Pluripotent Germ Cells

Foreign Patent or Published Foreign Patent Application

Examiner Initial	Ref.	Document No.	Publ. Date	Juris-diction	Title:	Translation	
						Yes	No
QN	R	WO 93/09815	May 27/93	PCT	Specific Tolerance in Transplantation		
QN	S	WO 93/13785	Jul 22/93	PCT	Induced Tolerance to Xenografts		

Examiner _____ Date Considered _____

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U.S. Pat. & Tm. Off. 09/99/05/22
11/21/01

Foreign Patent or Published Foreign Patent Application

Examiner Initial	Ref.	Document No.	Publ. Date	Jurisdiction	Title:	Translation	
						Yes	No
QN	T	WO 93/18137	Sep 16/93	PCT	Culturing of Hematopoietic Stem Cells and Their Genetic Engineering		
	U	WO 95/03062	Feb 2/95	PCT	Methods and Compositions for Preventing Immune Rejection of Solid Organ Grafts		
	V	WO 95/21527	Aug 17/95	PCT	Stem Cell Engraftment		
	W	WO 97/41863	Nov 13/97	PCT	Mixed Chimerism and Tolerance		
	X	WO 99/20741	Apr 29/99	PCT	Methods and Materials for the Growth of Primate-derived Primordial Stem Cells		
	Y	WO 99/39727	Aug 12/99	PCT	Costimulatory Blockade and Mixed Chimerism in Allogeneic Transplantation		
	Z	WO 99/51275	Oct 14/99	PCT	Mesenchymal Stem Cells as Immunosuppressants		
QN	AA	WO 00/06194	Feb 10/00	PCT	Depletion of Cells Responsible for Antibody-Mediated Graft Rejection		

Other Documents

Examiner Initial	Ref.	Author, Title, Date, Source
QN	AB	Alferink, J., et al., "Control of Neonatal Tolerance to Tissue Antigens by Peripheral T Cell Trafficking," <i>Science</i> 282:1338 (1998)
	AC	Amit, M., et al., "Clonally Derived Human Embryonic Stem Cell Lines Maintain Pluripotency and Proliferative Potential for Prolonged Periods of Culture," <i>Dev. Biol.</i> , 227:271 (2000)
	AD	Auerback, J., et al., "Transplanted CNS Stem Cells Form Functional Synapses In Vivo," <i>Eur. J. Neurosci.</i> , 12:1969 (2000)
	AE	Bachar-Lustig, E., et al., "Induction of Donor-Type Chimerism and Transplantation Tolerance across Major Histocompatibility Barriers in Sublethally Irradiated Mice by Sca-1+Lin- Bone Marrow Progenitor Cells: Synergism With Non-Alloreactive (Host x Donor) F1 T Cells," <i>Blood</i> 94:3212 (1999)
	AF	Bodnar, et al., "Extension of Life-Span by Introduction of Telomerase into normal Human Cells," <i>Science</i> 279:349 (1998)
	AG	Brustle, O., et al., "Embryonic Stem Cell-Derived Glial Precursors: A Source of Myelinating Transplants," <i>Science</i> 285:754 (1999)
	AH	Childs, R., et al., "Engraftment Kinetics After Nonmyeloablative Allogeneic Peripheral Blood Stem Cell Transplantation: Full Donor T-Cell Chimerism Precedes Alloimmune Responses," <i>Blood</i> 94:3234 (1999)
	AI	Choi, et al., "A Common Precursor for Hematopoietic and Endothelial Cells," <i>Development</i> 125:725 (1998)
	AJ	Colson, Y., et al., "The Abrogation of Allosensitization Following the Induction of Mixed Allogeneic Chimerism," <i>J. of Immunology</i> 165:637 (2000)
	AK	Durham, M., et al., "Cutting Edge: Administration of Anti-CD40 Ligand and Donor Bone Marrow Leads to Hemopoietic Chimerism and Donor-Specific Tolerance Without Cyoreductive Conditioning," <i>J. of Immunology</i> 165:1 (2000)
	AL	Fairchild, P., et al., "Directed Differentiation of Dendritic Cells from Mouse Embryonic Stem Cells," <i>Curr. Biol.</i> 10:1515 (2000)
	AM	Fairchild, P., et al., "Dendritic Cells and Prospects for Transplantation Tolerance," <i>Curr. Opin. Immunol.</i> 12:528 (2001)
QN	AN	Ferguson, T., et al., "T Cells Are Just Dying to Accept Grafts," <i>Nature Medicine</i> 5:1231 (1999)

Examiner	Date Considered
Quay Walker	6/14/03

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Information Disclosure Statement By Applicant

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Inventors: Choy-Pik Chiu, Robert M. Kay

Filing Date: November 21, 2001

Group: To Be Assigned *K36*1028 U.S. PRO
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Other Documents

Examiner Initial	Ref.	Author, Title, Date, Source
<i>QN</i>	AO	Gammie, J., et al., "A Partial Conditioning Strategy for Achieving Mixed Chimerism in the Rat: Tacrolimus and Anti-Lymphocyte Serum Substantially Reduce the Minimum Radiation Dose for Engraftment," <i>Exp. Hematology</i> 26:927 (1998)
	AP	Garovoy, M., et al., "Clinical Transplantation," <i>Basic & Clinical Immunology</i> 8:744 (1994)
	AQ	Guillot, C., et al., "Tolerance to Cardiac Allografts Via Local and Systemic Mechanisms After Adenovirus-Mediated CTLA4Ig Expression," <i>J. Immun.</i> 164:5258 (2000)
	AR	Gutierrez-Ramos, et al., "In Vitro Differentiation of Embryonic Stem Cells Into Lymphocyte Precursors able to Generate T and B Lymphocytes In Vivo," <i>Proc. Natl. Acad. Sci. USA</i> 89:9171 (1992)
	AS	Hansal, S., et al., "Cutting Edge: Induction of Antigen-Specific Hyporesponsiveness by Transplantation of Hemopoietic Cells Containing an MHC Class I Transgene Regulated by a Lymphocyte-Specific Promoter," <i>J. Immun.</i> 161:1063 (1998)
	AT	Hart, D., "Dendritic Cells: Unique Leukocyte Populations Which Control the Primary Immune Response," <i>Blood</i> 90:3245 (1997)
	AU	Huhn, R., et al., "Retroviral Marking and Transplantation of Rhesus Hematopoietic Cells by Nonmyeloablative Conditioning," <i>Human Gene Therapy</i> 10:1783 (1999)
	AV	Kaufman, et al., "Hematopoietic Colony Forming Cells Derived from Human Embryonic Stem Cells," <i>Keystone Symposium on Stem Cells Abstract</i> 315 (2000)
	AW	Keller, G., et al., "In Vitro Differentiation of Embryonic Stem Cells," <i>Curr. Opin. Cell Biol.</i> 7:862 (1995)
	AX	Keller, G., et al., "Hematopoietic Commitment During Embryonic Stem Cell Differentiation in Culture," <i>Mol. Cell Biol.</i> 13:473 (1993)
	AY	Ko, S., et al., "The Functional Relevance of Passenger Leukocytes and Microchimerism for Heart Allograft Acceptance in the Rat," <i>Nature Medicine</i> 5:1292 (1999)
	AZ	Lakkis, F., et al., "Immunologic 'Ignorance' of Vascularized Organ Transplants in the Absence of Secondary Lymphoid Tissue," <i>Nature Medicine</i> 6:686 (2000)
	BA	Min, W., et al., "Dendritic Cells Genetically Engineered to Express Fas Ligand Induce Donor-Specific Hyporesponsiveness and Prolong Allograft Survival," <i>J. Immun.</i> 164:161 (2000)
	BB	Morita, H., et al., "A Strategy for Organ Allografts Without Using Immunosuppressants or Irradiation," <i>Proc. Natl. Acad. Sci. USA</i> 95:6947 (1998)
	BC	Morelli, A., et al., "Potential of Tolerogenic Dendritic Cells for Transplantation," <i>Seminars in Immun.</i> 13:323 (2001)
	BD	Nakano, et al., "Generation of Lymphohematopoietic Cells From Embryonic Stem Cells in Culture," <i>Science</i> 265:1098 (1994)
	BE	Nierhoff, D., et al., "Microchimerism in Bone Marrow-Derived CD34+ Cells of Patients After Liver Transplantation," <i>Blood</i> 96:763 (2000)
	BF	Nilsson, S., et al., "Cells Capable of Bone Production Engraft from whole Bone Marrow Transplants in Nonablated Mice," <i>J. Exp. Med.</i> 189:729 (1999)
	BG	Odorico, J., et al., "Pancreatic Gene Expression in Differentiating Embryonic Stem Cells," <i>Keystone Symposium: Stem Cells, Asymmetric Cell Division and Cell Fate, Abstract</i> 324;76 (2000)
	BH	Palacios, et al., "In Vitro Generation of Hematopoietic Stem Cells From an Embryonic Stem Cell Line," <i>Proc. Natl. Acad. Sci. USA</i> 92:7530 (1995)
	BI	Potocnik, et al., "In Vitro Generation of Lymphoid Precursors From Embryonic Stem Cells," <i>EMBO J</i> 13:5274 (1994)
<i>QN</i>	BJ	Schuchert, M., et al., "Characterization of Newly Discovered T-Cell Receptor Beta-chain Heterodimer Expressed on a CD8+ Bone Marrow Subpopulation That Promotes Allogeneic Stem Cell Engraftment," <i>Nature Medicine</i> 6:904 (2000)

Examiner	<i>Quang Nguyen</i>	Date Considered	<i>6/4/03</i>
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S.S.N. To Be Assigned

Information Disclosed
Statement By Applicant

(Use Several Sheets if Necessary)

Title: Tolerizing Allografts of Pluripotent Stem Cells
Inventors: Choy-Pik Chiu, Robert M. Kay

Filing Date: November 21, 2001

Group: To Be Assigned

1636
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09/200522

11/21/01

Other Documents

Examiner Initial	Ref.	Author, Title, Date, Source
QW	BK	Shambrott, et al., "Derivation of Pluripotent Stem Cells From Cultured Human Primordial Germ Cells," Proc. Natl. Acad. Sci. USA 95:13726 (1998)
	BL	Starzl, et al., "Cell Migration, Chimerism and Graft Acceptance," Lancet 339:1579 (1992)
	BM	Starzl, et al., "Chimerism After Liver Transplant for Type IV Glycogen Storage Disease and Type 1 Gaucher's Disease," N. Eng. J Med 328:745 (1993)
	BN	Steinman, R., et al., "The Induction of Tolerance by Dendritic Cells that Have Captured Apoptotic Cells," J. Exp. Med. 191:411 (2000)
	BO	Thomson, J., et al., "Isolation of a Primate Embryonic Stem Cell Line," Proc. Natl. Acad. Sci. USA 92:7844 (1995)
	BP	Thomson, et al., "Embryonic Stem Cell Lines Derived from Human Blastocysts," Science 282:1145 (1998)
	BQ	Tomita, Y., et al., "Induction of Permanent Mixed Chimerism and Skin Allograft Tolerance Across Fully MHC-Mismatched Barriers by the Additional Myelosuppressive Treatments in Mice Primed with Allogeneic Spleen Cells Followed by Cyclophosphamide," J. Immun. 164:34 (2000)
	BR	Umemura, A., et al., "Donor MHC Class II Antigen is Essential for induction of Transplantation Tolerance by Bone Marrow Cells," J. Immun. 164:4452 (2000)
	BS	Waldmann, H., "Transplantation Tolerance - Where Do We Stand?" Nature Medicine 5:1245 (1999)
	BT	Waller, E., et al., "Irradiated Donor Leukocytes Promote Engraftment of Allogeneic Bone Marrow in Major Histocompatibility Complex Mismatched Recipients Without Causing Graft-Versus-Host Disease," Blood 94:3222 (1999)
	BU	Wekerle, T., et al., "Allogeneic Bone Marrow Transplantation with Co-Stimulatory Blockade Induces Macrochimerism and Tolerance Without Cytoablative Host Treatment," Nature Medicine 6:464 (2000)
QW	BV	Wiles, M.V., et al., "Multiple Hematopoietic lineages Develop from Embryonic Stem (ES) Cells in Culture," Development 111:259 (1991)

Examiner	Date Considered
<i>Ricky Dwyer</i>	6/14/03

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See Paper #3

Form 1449 (modified)	Docket: 097/002	S.S.N. 09/990,522
Information Disclosure Statement By Applicant	Title: Tolerizing Allografts of Pluripotent Stem Cells Inventors: Choy-Pik Chiu, Robert M. Kay	
(Use Several Sheets if Necessary)	Filing Date: November 21, 2001	Group: 1632

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U.S. Patent Documents

Examiner Initial	Ref.	Patent No.	Filing Date	Issue Date	Class/ Subclass	Inventors:	Title:
QIN	CA	5,914,268	Nov 21/94	Jun 22/99	435/325	G.M. Keller et al.	Embryonic Cell Population and Methods to Isolate Such Populations

Foreign Patent or Published Foreign Patent Application

(None)

Other Documents

(None)

Examiner	Quang Nguyen	Date Considered	6/15/03

Examiner: Initial if citation considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

See Paper #7

Form 1449 (modified)

Docket: 097/002 3d Supplemental

S.S.N. 09/990,522

Information Disclosed
Statement By Applicant

Title: Tolerizing Allografts of Pluripotent Stem Cells
Inventors: Choy-Pik Chiu, Robert M. Kay

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Filing Date: November 21, 2001

Group: 1636

U.S. Patent Documents

Examiner Initial	Ref.	Patent No.	Filing Date	Issue Date	Class/ Subclass	Inventors:	Title:
NONE							

Foreign Patent or Published Foreign Patent Application

Examiner Initial	Ref.	Document No.	Publ. Date	Jurisdiction	Title:	Translation
QN	EA	WO 98/42838	Oct 1/98	PCT	Universal Stem Cells	N/A
QN	EB	WO 02/46401	Jun 13/02	PCT	Use of Cells Derived from Embryonic Stem Cells for Increasing Transplantation Tolerance and for Repairing Damaged Tissue	Abstract

Other Documents

Examiner Initial	Ref.	Author, Title, Date, Source
QN	EC	Fandrich, et al., Preimplantation-stage cells induce long-term allogeneic graft acceptance without supplementary host conditioning, Nature Medicine 8:171 (2002)

Examiner	Date Considered
<i>Luc Noyen</i>	6/04/03

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Form 1449 (modified)	Docket: 097/002	S.S.N. 09/990,522
Third Supplemental Information Disclosure Statement By Applicant	Title: Tolerizing Allografts of Pluripotent Stem Cells Inventors: Choy-Pik Chiu, Robert M. Kay	
(Use Several Sheets if Necessary)	Filing Date: November 21, 2001	Group: 1636

U.S. Patent Documents

Examiner Initial	Ref.	Patent No.	Filing Date	Issue Date	Class/ Subclass	Inventors:	Title:
none							

Foreign Patent or Published Foreign Patent Application

Examiner Initial	Ref.	Document No.	Publ. Date	Jurisdiction	Title:	Translation
	ED	WO 00/12682	Mar 9/00	PCT	Primate Embryonic Stem Cells with Compatible Histocompatibility Genes	N/A
	EE	WO 00/28000	May 18/00	PCT	Method for Producing Dendritic Cells	N/A
	EF	WO 01/11011	Feb 15/01	PCT	Multipotent Adult Stem Cells and Methods for Isolation	N/A

Other Documents

Examiner Initial	Ref.	Author, Title, Date, Source
	EG	Adler, et al., Stemming the tide of rejection, Nat. Med. 8(2):107-108 (Feb. 2002)

Examiner	Date Considered

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